OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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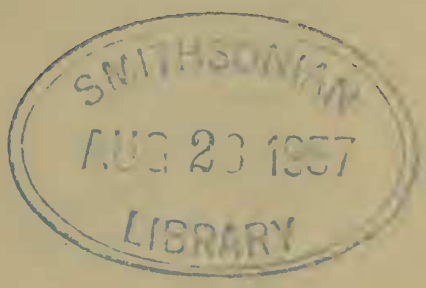
OPINION 475

Validation under the Plenary Powers of the generic name *Bithynia* Leach, 1818 (Class Gastropoda) and matters associated therewith



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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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OPINION 475

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "BITHYNIA" LEACH, 1818 (CLASS GASTROPODA) AND MATTERS ASSOCIATED THEREWITH

RULING :—(1) Under the Plenary Powers the under-mentioned generic name is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy : *Bulimus* Scopoli, 1777.

(2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below :—

(a) *Bithynia* Leach, 1818, as validated under the Plenary Powers in (1) above (gender : feminine) (type species, by original designation : *Helix tentaculata* Linnaeus, 1758) (Name Number 1195);

(b) *Ena* Turton, 1831 (gender : feminine) (type species, by selection by Herrmannsen (1847) : *Bulimus montanus* Draparnaud, [1801]) (Name No. 1196).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

(a) *tentaculata* Linnaeus, 1758, as published in the combination *Helix tentaculata* (specific name of type species of *Bithynia* Leach, 1818) (Name No. 1301) ;

(b) *montanus* Draparnaud, [1801], as published in the combination *Bulimus montanus* (specific name of type species of *Ena* Turton, 1831) (Name No. 1302) ;

(c) *obscura* Müller (O.F.), 1774, as published in the combination *Helix obscura* (Name No. 1303).

(4) The under-mentioned generic names or reputed generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Numbers severally specified below :—

(a) *Bulimus* Scopoli, 1777, as suppressed under the Plenary Powers in (1) above (Name No. 935) ;

(b) *Bulimus* Scopoli, 1786 (a later usage of *Bulimus* Scopoli, 1777, though sometimes incorrectly cited in the literature as the name of a separately established genus, in which case it would have been a junior homonym of *Bulimus* Scopoli, 1777) (Name No. 936) ;

(c) *Bulimus* Bruguière, [1789] (a later usage of *Bulimus* Scopoli, 1777, though sometimes incorrectly cited in the literature as the name of a separately established genus, in which case it would have been a junior homonym of *Bulimus* Scopoli, 1777) (Name No. 937) ;

(d) *Bulimus* Pallary, 1901 (an Erroneous Subsequent Spelling of *Bulinus* Müller, 1781) (Name No. 938) ;

(e) *Bulimula* Dall, 1885 (an Erroneous Subsequent Spelling for *Bulimus* Scopoli, 1777) (Name No. 939) ;

(f) *Bulinus* Broderip, 1828 (an Invalid Emendation of *Bulimus* Scopoli, 1777, and a junior homonym of *Bulinus* Müller, 1781) (Name No. 940) ;

(g) *Bithinia* Gray (J.E.), 1821 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818) (Name No. 941) ;

(h) *Bitinia* Sacco, 1889 (an Erroneous Subsequent Spelling for *Bithynia* Leach, 1818) (Name No. 942) ;

(i) *Bythiia* Bollinger, 1912 (an Erroneous Subsequent Spelling for *Bithynia* Leach, 1818) (Name No. 943) ;

(j) *Bythina* Rosen, 1925 (an Erroneous Subsequent Spelling for *Bithynia* Leach, 1818) (Name No. 944) ;

(k) *Bythinea* Nevill, 1881 (an Erroneous Subsequent Spelling for *Bithynia* Leach, 1818) (Name No. 945) ;

(l) *Bythinia* MacGillivray (W.), 1843 (an Erroneous Subsequent Spelling for *Bithynia* Leach, 1818) (Name No. 946) ;

(m) *Bythinia* Stein, 1850 (an Invalid Emendation of *Bithinia* Gray 1821) (Name No. 947) ;

(n) *Bythynia* Prashad, 1925 (an Erroneous Subsequent Spelling for *Bithynia* Leach, 1818) (Name No. 948) ;

(o) *Bytinia* Millet de la Turtaudière (P.A.), 1870 (an Erroneous Subsequent Spelling for *Bithynia* Leach, 1818) (Name No. 949).

(5) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Number 181 :—

BITHYNIIDAE (correction of BITHINIADAE) Gray (J.E.), 1857 (type genus : *Bithynia* Leach, 1818) (for use by specialists who on taxonomic grounds consider that the genus *Bithynia* Leach is not referable to any nominal family-group taxon having an older name).

(6) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name Numbers severally specified below :—

(a) BITHINIADAE Gray (J.E.), 1857 (an Invalid Original Spelling for BITHYNIIDAE) (type genus : *Bithynia* Leach, 1818) (Name No. 213) ;

(b) BULIMIDAE Guilding, 1828 (type genus : *Bulimus* Scopoli, 1777) (invalid under *Declaration* 20 because type genus suppressed under the Plenary Powers in (1) above) (Name No. 214).

I. THE STATEMENT OF THE CASE

On 8th February 1950 a preliminary communication in regard to the possible preservation of the generic name *Bithynia* Leach, 1818, by means of action under the Plenary Powers was received in the Office of the Commission from Mr. A. E. Ellis (*Epsom College, Epsom, England*). Consequent upon correspondence

with the Secretary the following substantive application was submitted to the International Commission on Zoological Nomenclature by Mr. Ellis on 5th January 1955 :—

Proposed validation under the Plenary Powers of the generic name " Bithynia " Leach, 1818 (Class Gastropoda)

By A. E. ELLIS

(*Epsom College, Epsom, Surrey, England*)

The purpose of the present application is to ask the International Commission to use its Plenary Powers for the purpose of validating the generic name *Bithynia* Leach, 1818 (Sub-class Prosobranchia, Order Mesogastropoda), thus preventing the appalling confusion and disturbance which would result from the disappearance of this long-established name as a junior synonym of *Bulimus* Scopoli, 1777.

2. The generic name *Bithynia* Leach, 1818 (*in* Clarke Abel's *Narrative of a Journey in the Interior of China* : 362), has as its type, *Helix tentaculata* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) **1** : 774) by original designation by Leach. Apart from Leach's designation this species would also be the type by monotypy, as the only other species included in the genus, *Paludina sinensis* Leach (*op. cit.*, 155) was at that time undescribed. The name appears to be taken from Bithynia, a province of Asia Minor, though what led the author to choose this inappropriate name is not apparent ; it is regarded as of feminine gender.

3. For over a century the generic name *Bithynia* Leach (though frequently misspelt *Bythinia* or *Bithinia*) has been universally employed for this and allied species and has given its name to a subfamily. Its displacement on technical nomenclatorial grounds would be open to the gravest objections, and the substitution of some virtually unknown name in place of *Bithynia* would serve no useful purpose of any kind, causing, as it undoubtedly would, quite unnecessary confusion and instability in the nomenclature of this group.

4. It is with these considerations in mind that we must examine the status of the generic name *Bulimus* Scopoli, 1777 (*Introductio ad Historiam Naturalem* : 392). The species included in this genus by Scopoli were *Helix putris*, *H. fragilis*, *H. stagnalis* and *H. tentaculata*, all of Linnaeus, 1758. Of these species, *H. putris* is the type species of *Succinea* Draparnaud, [1801], which has been placed on the *Official List* by the Ruling given in *Opinion* 94 ; *H. stagnalis* was selected as

the type species of *Lymnaea* Lamarck, 1799, by Fleming, 1818 (see Application Z.N.(S.) 451) ; *H. fragilis* is a synonym of *H. stagnalis* ; while, as has been shown above, *H. tentaculata* was designated the type species of his genus *Bithynia* by Leach, 1818.

5. The name *Bulimus*, like many other generic names first published by Scopoli in the same work, was completely ignored for over a hundred years. During the inter-war period, however, this generic name was brought to the attention of the International Commission on Zoological Nomenclature and formed the subject of the Commission's *Opinion* 116, published in 1931 (*Smithson. misc. Coll.* **73** (No. 7) : 6). In that *Opinion* the Commission ruled that the name *Bulimus* Scopoli, 1777, could not be interpreted as a typographical error for *Bulinus* Müller, 1781, a name which was applied to a different genus four years subsequent to the publication of *Bulimus* Scopoli. The Commission went on to say that, according to the premises submitted, it did not appear that a type species had ever been validly selected for Scopoli's genus. This was no doubt the case at the time when the application on which *Opinion* 116 was based was submitted to the Commission, but in the meanwhile Pilsbry & Bequaert, 1927 (*Bull. Amer. Mus. Nat. Hist.* **53** : 215) had selected *Helix tentaculata* Linnaeus, 1758, to be the type species of this genus. By this action they destroyed the availability of the well-known generic name *Bithynia* Leach, 1818, making it a junior objective synonym of the till then virtually unknown name *Bulimus* Scopoli, 1777.

6. The situation resulting from this action is deplorable from every point of view, but the evil consequences are not limited to the suppression of a well-known name. The disappearance in synonymy of the universally-used generic name *Bithynia* Leach could in the most favourable circumstances lead only to confusion and instability in the nomenclature of the group to which this widely distributed genus belongs. In the present instance, however, the harm caused would be greatly aggravated and the likelihood of confusion much enhanced by the fact that the name (*Bulimus*) by which *Bithynia* Leach would be replaced was used throughout the 19th century, not for any of the species included in Scopoli's genus of 1777, but for various totally unrelated land-snails. This came about as a consequence of the extension of the genus *Bulimus* by Bruguière, [1789] (*Encycl. méth.* Vers 1 : xvi, 286) to embrace a heterogeneous assortment of species, most of which were not included in Scopoli's genus. Subsequent authors adopted the generic name *Bulimus* from Bruguière for divers species of land snails in no way connected with any of Scopoli's original species, having little in common beyond a varying degree of superficial similarity in the general shape of the shell, and now classified in a number of separate genera. British authors throughout the 19th century used

the generic name *Bulimus* for *Bulimus montanus* Draparnaud, [1801] (*Tableau des Mollusques terrestres et fluviatiles de la France* : 65) and *Helix obscura* Müller, 1774 (*Verm. Hist.* **2** : 103), = *Bulimus hordaceus* Bruguière, 1789 (*loc. cit.* : 334). *Helix obscura* Müller was selected as the type species of the genus *Bulimus* by Turton, 1831 (*Manual of the Land and Fresh-water Shells of the British Islands* : 6) but this selection was invalid, as the above species is not one of the species included in *Bulimus* by Scopoli. These two species are now placed in the genus *Ena* Turton, 1831 (*loc. cit.* 80), the type species of which is *Ena montana* (Draparnaud), selected by Herrmannsen, 1847 (*Indicis Generum Malacozoorum Primordia* **1** : 421).

7. The genus *Bithynia* Leach was made the type genus of a family BITHINIADAE [*sic.*] by Gray (J.E.) in 1857 (Turton's *Manual Land & Fresh-water Shells Brit. Isles* (3rd Ed.) : xiii). In the same year Troschel (F.H.) (1857, *Das Gebise der Schnecken* : 101) made this genus the type genus of a tribe which he called BYTHINIAE. In 1926 it was treated as the type genus of a subfamily BITHYNIINAE by Kennard (A.S.) & Woodward (B.B.) (*Synonymy of the British non-Marine Mollusca* : xii). Since Gray's family name and Troschel's tribe name were published in the same year (1857) it is necessary to determine which has priority over the other. The preface to Gray's edition of Turton is dated September 1857, while no information is available as to the date in 1857 on which Troschel's book appeared. Accordingly, under the provisions inserted in the *Règles* by the Thirteenth International Congress of Zoology, Paris, 1948, for determining the dates to be assigned to zoological works (1950, *Bull. zool. Nomencl.* **4** : 223—225) Troschel's book is to be treated as having been published on 31st December 1857 (the latest date on which it can have been published). It is seen therefore that Gray was the first author to make the genus *Bithynia* Leach the type genus of a family-group taxon. Modern authors follow Kennard & Woodward, treating this taxon as of subfamily rank and placing it in the family HYDROBIIDAE.

8. Mr. Hemming, as Secretary to the Commission, informed me while the present application was in draft that a similar application had been received from Dr. Joshua L. Baily, Jr. (*San Diego, California, U.S.A.*) and that, in order to facilitate the consideration of this case, he had suggested to Dr. Baily that it would be convenient if he would convert his application into a note of support for the present application, of which he sent a copy to Dr. Baily. Dr. Baily intimated that this course was perfectly agreeable to him and in due course he furnished a note of his views on the action proposed. In this note Dr. Baily drew attention, *inter alia*, to two variant spellings of the name *Bithynia* Leach which he recommended should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. I agree that this

action is desirable and, at Mr. Hemming's suggestion, I have incorporated proposals to this end in the present paper in order that, when the Commission comes to vote on this case, it may have a single comprehensive proposal before it. The variant spellings concerned are :—(1) *Bithinia* Gray (J.E.), 1821, *London med. Repository*: 239 ; and (2) *Bythinia* MacGillivray (W.), 1843, *Hist. Moll. Aberdeen* : 124. Both of these on examination prove to be Erroneous Subsequent Spellings and not Invalid Emendations. As such, these spellings possess no status in zoological nomenclature and should, as suggested by Dr. Baily, now be placed on the *Official Index*. Finally, similar action should be taken in relation to the Erroneous Subsequent Spelling *Bytinia* Millet de la Turtaudière (P.A.), 1870 (*Faune des Invertébrés de Maine-et-Loire* 2 : 56).

9. It would be difficult to imagine anything more confusing than would be the replacement of the well-known name *Bithynia* Leach by a name which was for so long associated with a number of species belonging to a different Sub-Class. I feel therefore that this is pre-eminently a case where the use by the Commission of its Plenary Powers is essential. I accordingly ask the Commission :—

(1) to use its Plenary Powers to suppress the under-mentioned generic name for the purpose of the Law of Priority but not for those of the Law of Homonymy :—*Bulimus* Scopoli, 1777 ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

(a) *Bithynia* Leach, 1818 (gender : feminine) (type species, by original designation : *Helix tentaculata* Linnaeus, 1758) ;

(b) *Ena* Turton, 1831 (gender : feminine) (type species, by selection by Herrmannsen (1847) : *Bulimus montanus* Draparnaud, [1801]) ;

(3) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

(a) *Bulimus* Scopoli, 1777, as suppressed under the Plenary Powers under (1) above ;

(b) *Bulimus* Bruguière, [1789] (a junior homonym of *Bulimus* Scopoli, 1777) ;

(c) *Bithinia* Gray (J.E.), 1821 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818) ;

(d) *Bythinia* MacGillivray (W.), 1843 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818) ;

(e) *Bytinia* Millet de la Turtaudière (P.A.), 1870 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818) ;

(4) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

(a) *tentaculata* Linnaeus, 1758, as published in the combination *Helix tentaculata* (specific name of type species of *Bithynia* Leach, 1818) ;

(b) *montanus* Draparnaud, [1801], as published in the combination *Bulimus montanus* (specific name of type species of *Ena* Turton, 1831) ;

(c) *obscura* Müller (O.F.), 1774, as published in the combination *Helix obscura* ;

(5) to place the under-mentioned name on the *Official List of Family-Group Names in Zoology* :—BITHYNIIDAE (correction of BITHINIADAE) Gray (J.E.), 1857 (type genus : *Bithynia* Leach, 1818) ;

(6) to place the under-mentioned name on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—BITHINIADAE Gray (J.E.), 1857 (type genus : *Bithynia* Leach, 1818) (an Invalid Original Spelling for BITHYNIIDAE).

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : Upon the receipt of the preliminary communication from Mr. A. E. Ellis in 1950, the question of the preservation of the generic name *Bithynia* Leach, 1818, was allotted the Registered Number Z.N.(S.) 452.

3. Support received from Joshua L. Baily, Jr. (San Diego, California, U.S.A.) prior to the publication of the present application : On 25th February 1951, Dr. Joshua L. Baily, Jr. (*San Diego, California, U.S.A.*) addressed a communication to the Office of the Commission in which he indicated his desire for the protection of the generic name *Bithynia* Leach on lines similar to those previously advanced by Mr. Ellis. Following correspondence with the Secretary, Dr. Baily decided not himself to make an application to the Commission in regard to the foregoing name, submitting instead a reasoned statement in support of the application made by Mr. Ellis. This statement, which bore the date 5th March 1953, was as follows :—

Support for the validation under the Plenary Powers of " Bithynia " Leach, 1818 (Class Gastropoda)

By JOSHUA L. BAILY, Jr.

(*San Diego, California, U.S.A.*)

Some time ago I submitted an application in regard to the generic name *Bithynia* Leach, 1818, one of twelve generic names which many years ago were brought to the attention of the Commission in a blanket application which was dealt with in part in the Commission's *Opinion* 119. The name *Bithynia* Leach was, however, one of six names on which no decision was given in the foregoing *Opinion.*

When visiting in England last summer (1952) I was informed by Mr. Francis Hemming, Secretary to the Commission, that Mr. A. E. Ellis had already submitted an application covering this matter, to which had been assigned the reference number Z.N.(S.) 452. Mr. Hemming felt that in view of this it would be more satisfactory if I should recast my communication in such a way as to give it the form of a comment upon that of Mr. Ellis, rather than making it a separate application seeking the same end. This suggestion meets completely with my approval. Mr. Ellis has stated the case so clearly that another application would be redundant, so I shall therefore confine this communication to commenting upon that of Mr. Ellis.

First of all it should be noted that in *Opinion* 116 cited it was not stated that *Bulimus* Scopoli, 1777, was not a typographical error for *Bulinus* Adanson, pre-Linnaean, but merely that the Commission as then constituted was not convinced that it was. Further bibliographic

research might conceivably shed additional light on this matter. Therefore this is not necessarily a case in which strict application of the Rules would lead to confusion ; rather it is a case in which the Rules cannot be applied at all because we do not as yet have access to all the necessary facts, and perhaps may never have it. The name *Bulimus* must therefore remain a term whose meaning is uncertain, or at least is of ambiguous signification, and it should be suppressed for this reason regardless of what its type designation may be.

In the second place it should be noted that when Pilsbry and Bequaert (1927, *Bull. Amer. Mus. nat. Hist.* **53** : 215) designated the type species of this genus they chose the least of three evils ; to have selected either of the other species originally cited by Scopoli (1777, *Introductio ad Historiam Naturalem* : 392) would have consigned to oblivion the names *Succinea* and *Lymnaea*, genera far larger numerically than *Bithynia* and therefore more widespread and more frequently referred to in the literature. To refuse to select a type species would have left the way open for later writers to make the less desirable selection. Mr. Ellis is quite right in saying that the situation is deplorable—but any other action, or refusal to take action, would precipitate an even more deplorable situation. In fact, the only way out of the impasse is to suspend the Rules as Mr. Ellis has requested, and suppress entirely the name *Bulimus* Scopoli, 1777, and to validate the name *Bithynia* Leach, 1818, with the species *Helix tentaculata* Linnaeus as type species, putting the last two names on the appropriate *Official Lists*.

In addition to this action Mr. Ellis has requested the validation of the name *Ena* Turton, 1831 (*Man. L. & F. W. Shells Brit. Is.* : 6), but I do not join in this request merely because I have not familiarised myself with the data concerning this name, as the genus is not an American one.

There are, however, additional actions which should be undertaken at the same time that *Bithynia* is considered. Among these are the names *Bythinia* (W. MacGillivray, 1843, *Hist. Moll. Aberdeen* : 124) and *Bithinia* (J. E. Gray, 1829, *London Medical Repository* : 239). These are either errors for or emendations of *Bithynia* Leach, and should be suppressed in such a way as to prevent them being used in the future for any other genus. Since they are sufficiently different in spelling from *Bithynia* to coexist with it, action of this sort is necessary to guard against the possibility of having names that sound the same in legal use with different significations.

Another action needed is the suppression of *Bulimus* as used by A. G. Bruguière ([1789], *Ency. Méth.* Vers **1** : xvi ; 286). It is possible

that Bruguière thought that the land snails which he designated by this name were congeneric with the species listed by Scopoli in 1777, but it seems to me more likely that Bruguière considered that Scopoli's reference to Adanson indicated that *Bulimus* Scopoli was intended for *Bulinus* Adanson and that such use of it did not preclude its later use by Bruguière. Mr. Ellis states that the type of *Bulimus* as used by Bruguière had as type the species now known as *Ena montana* Draparnaud. But Pilsbry (1895, *Man. Conch.* (ser. 2) **10 : 4**) states that Scopoli himself used *Bulimus* in 1786 for the genus now known as *Strophocheilus* Spix. Thus the name *Bulimus* has been used for three different genera now placed each in a different tribe, and its continued usage cannot help but produce confusion, for which reason it should be suppressed in such a way that it can never be resuscitated again for any purpose.

To recapitulate, I would request that you take the following actions, suspending the rules where necessary :

(1) to suppress the following names, placing them on the *Official List of Invalid and Rejected Names in Zoology* :

(a) *Bulimus* Scopoli, 1777

(b) *Bulimus* Bruguière, [1789]

(c) *Bithinia* Gray, 1821

(d) *Bythinia* MacGillivray, 1843 ;

(2) to validate the name *Bithynia* Leach, 1818, and to place it on the *Official List of Generic Names in Zoology* with the species *Helix tentaculata* Linnaeus, 1758, as type by monotypy ;

(3) to place upon the *Official List of Specific Names in Zoology* the name *tentaculata* Linnaeus, 1758, as originally published in the combination *Helix tentaculata* ;

(4) to prepare a separate application (or to invite Mr. Ellis to do so) to cover the genus *Ena* Turton, 1831, and the names of the two species contained in it upon which Mr. Ellis has requested action.

4. Publication of the present application : The documents relating to the present case were sent to the printer on 23rd August 1955 and were published on 30th December in the same year in Part 9 of Volume 11 of the *Bulletin of Zoological Nomenclature* (Ellis, 1955, *Bull. zool. Nomencl.* **11** : 275—278 ; Baily, 1955, *ibid.* **11** : 279—280).

5. Issue of Public Notices : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 30th December 1955 (a) in Part 9 of Volume 11 of the *Bulletin of Zoological Nomenclature* (the Part in which Mr. Ellis's application and Dr. Baily's supporting note were published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications and to two specialist serials in Europe and America.

6. Comments received : The publication of Mr. Ellis's application and Dr. Baily's supporting note elicited comments from five specialists. Of these four (resident in Sweden, The Netherlands, the United States of America and the United Kingdom respectively) supported the action proposed, while one (resident in Germany) objected to that action. The comments so received are reproduced in the immediately following paragraphs.

7. Support received from B. Hubendick (Naturhistoriska Rijksmuseum, Stockholm) : On 17th April 1956, Dr. B. Hubendick (*Naturhistoriska Rijksmuseum, Stockholm*) intimated his support for the present application as follows (Hubendick, 1956, *Bull. zool. Nomencl.* **11** : 336) :—

I wish to record my strong approval of Mr. Ellis's action in *Bull zool. Nomencl.* **11** : 275—278

8. Support received from C. O. Regteren Altena (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) : On 18th April

1956, Dr. C. O. Regteren Altena (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) sent the following letter to the Office of the Commission in support of the present application (Regteren Altena, 1956, *Bull. zool. Nomencl.* **11** : 336) :—

Mr. A. E. Ellis was so kind as to send me a copy of his " Proposed validation under the Plenary Powers of the generic name *Bithynia* Leach, 1818 (Class Gastropoda) " published in the *Bull. zool. Nomencl.* vol. 11, pp. 275—278.

I wholly agree with Mr. Ellis that the actions he asks to be taken on p. 278 of his paper would serve a useful purpose and prevent the confusion which would be the result of a general use of the generic name *Bulimus* Scopoli, 1777, for *Helix tentaculata* Linnaeus, 1758, and its near allies.

9. Support received from Dr. H. B. Baker (University of Pennsylvania, Philadelphia, U.S.A.) : On 30th April 1956, Dr. H. B. Baker (*University of Pennsylvania, Philadelphia, U.S.A.*) addressed the following letter to the Office of the Commission in support of the present application :—

Mr. A. E. Ellis has proposed the validation of *Bithynia* Leach. I am in favor of this.

10. Support received from Mr. H. Watson (Cambridge) : On 3rd September 1956, Mr. H. Watson (*Cambridge*) addressed the following letter to the Office of the Commission in support of the present case :—

I strongly support the application of Mr. A. E. Ellis asking the International Commission to use its Plenary Powers to validate the generic name *Bithynia* Leach, 1818, and prevent the great confusion which will result if the name *Bulimus* Scopoli, 1777, is substituted for it. If the name *Bulimus*, like many other generic names first published by Scopoli in the same work, had been completely ignored for over a hundred years, as stated at the top of paragraph 5 (on p. 276) of Mr. Ellis's application, even this revival of a long forgotten name in place of one that has been in general use for over a century would have been deplorable ; but it is only true that the name was long ignored in the sense that was originally given to it by Scopoli, who applied it

to three or four species living in fresh-water or marshes. The name, however, was soon extended by Bruguière and others to include also numerous land snails, as Ellis explains, and was for long very widely used for these latter forms particularly, the shells of which were consequently described as Bulimiform in shape, in contrast to Heliciform shells. Therefore now to apply this name *Bulimus* which has been used for so many land snails, to the very different operculate fresh-water genus *Bithynia* will cause great confusion—far more than if it had simply been ignored. Moreover, the name *Bulimus* is so inconveniently like *Bulinus*, the correct name of another genus of fresh-water Gastropods, that this would lead to still further confusion, whereas the retention of the familiar name *Bithynia* Leach can cause no confusion whatever.

11. Objection received from C. R. Boettger (Zoologisches Institut der Technischen Hochschule, Braunschweig, Germany) : On 15th February 1956, Professor C. R. Boettger (*Zoologisches Institut der Technischen Hochschule, Braunschweig, Germany*) addressed a letter to the Office of the Commission in which he expressed his objections to the action proposed in the present case as follows (Boettger, 1956, *Bull. zool. Nomencl.* **12** : 21) :—

That the generic name *Bulimus* Scopoli, 1777, cannot be considered as a printing error for *Bulinus* Müller, 1781, was established in 1931 (*Opinion* 116). The genus *Bulimus* Scopoli, 1777, has therefore full nomenclatorial status.

When the genus *Bulimus* Scopoli, 1777, was erected, it contained the following species : *Helix putris* L., *Helix fragilis* L., *Helix stagnalis* L. and *Helix tentaculata* L. The establishment of a type species did not follow soon after. It was done in 1927 by Pilsbry and Bequaert who, without any objections, fixed *Helix tentaculata* L. as being the type species of the genus *Bulimus* Scopoli. They were indeed entitled to choose one of the original species of this genus. The fact that since the establishment of *Bulimus* Scopoli (with the exception of *Helix fragilis* L. which is a synonym of *Helix stagnalis* L.) many other species were fixed to be the type species of other genera does not, according to the *Règles*, influence the choice of the type for *Bulimus* Scopoli.

Of course it was rather a nuisance that the genus *Bithynia* Leach, 1818, which was erected in 1818 for *Helix tentaculata* L., should now have become the synonym of *Bulimus* Scopoli, 1777, and that thereby a name which has been generally used should have to be given up. If at that time a proposal for the suppression of *Bulimus* Scopoli had

been made, I would undoubtedly have supported it. But now I cannot do this, for in the meantime the name *Bulimus* Scopoli as the genus for *Helix tentaculata* L. has appeared in many important publications on Molluscs, and is also much used in literature on parasitology which deals with those snails which act as carriers of germs which cause illness. It is now nearly thirty years since the determination of *Bulimus* Scopoli by means of the fixing of a type species by Pilsbry and Bequaert, and I consider it a great mistake to suppress this commonly used name. This would not help to clarify matters, but would doubtlessly add to confusion. I regret, therefore, that I cannot support A. E. Ellis's proposal, and I declare myself for the validity of *Bulimus* Scopoli, 1777, and the strict observance of Priority.

12. Supplementary proposals prepared in connection with the submission of the Voting Paper in the present case : At the time of the preparation of the Voting Paper relating to the present case Mr. Hemming, as Secretary, prepared a note—for incorporation in the Voting Paper as Note 5—in which he put forward supplementary proposals on three minor points to which attention had been drawn by correspondents during the Prescribed Six-Month Waiting Period following the publication of the present application in the *Bulletin of Zoological Nomenclature*. The points in question were the following :—

(a) If, as proposed, the generic name *Bulimus* Scopoli, 1777, were to be suppressed under the Plenary Powers, that action would under *Declaration* 20 carry with it automatically the invalidation of the family-group name BULIMIDAE Guilding, 1828 (*Zool. J.* **3** : 532), of which the above nominal genus is the type genus. In those circumstances the above name would need to be placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*.

(b) It appeared that not all specialists accepted the family-group name BITHYNIIDAE (correction of BITHINIADAE) Gray (J.E.) 1857 (type genus *Bithynia* Leach, 1818) as taxonomically required. Accordingly, in accordance with the General Directive in this matter issued to the Commission by the International Congress of Zoology, the entry relating

to this name to be made on the *Official List of Family-Group Names in Zoology* should be made subject to an endorsement that that name was so entered " for use by specialists who on taxonomic grounds consider that the genus *Bithynia* Leach is not referable to any nominal family-group taxon having an older name ".

(c) Attention had been drawn to the fact that the list of objectively invalid names which should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* set out in the application in the present case was not complete and that other Erroneous Subsequent Spellings and also certain Invalid Emendations ought to be placed on the *Official Index* at the time of the settlement in the present case. It had been pointed out also that the name *Bulimus* Bruguière, [1789], described in the application as a junior homonym of *Bulimus* Scopoli, 1777, should strictly be regarded as being no more than incorrect later usage of Scopoli's name. The invalid names covered by the foregoing recommendation were the following :—

(i) *Bulimus* Scopoli, 1786, *Delic. Flor. Faun. insubr.* **1** : 67 (like *Bulimus* Bruguière, [1789], discussed above, commonly (though incorrectly) treated in literature as the name for a separately established genus but in fact no more than a later usage of *Bulimus* Scopoli, 1777)

(ii) *Bulimus* Pallary, 1901, *Mém. Soc. géol. France*, Pal. Mém. **29** : 79 (an Erroneous Subsequent Spelling of *Bulinus* Müller, 1781)

(iii) *Bulimula* Dall, 1885, *Proc. U.S. nat. Mus.* **8** : 260 (an Erroneous Subsequent Spelling of *Bulimus* Scopoli, 1777)

(iv) *Bulinus* Broderip, 1828, *Zool. J.* **4**(14) : 222 (an Invalid Emendation of *Bulimus* Scopoli, 1777, and a junior homonym of *Bulinus* Müller, 1781)

(v) *Bitinia* Sacco, 1889, *Mem. Accad. Sci. Torino* (2) **39** : 84 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818)

(vi) *Bythiia* Bollinger, 1912, *NachBl. dtsch. Malakozool. Ges.* **44** : 177 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818)

(vii) *Bythina* Rosen, 1925, *Arch. Molluskenk.* **57**(3) : 120 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818)

(viii) *Bythinea* Nevill, 1881, *J. asiat. Soc. Bengal*, Pt. II. **50**(3) : 156 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818)

(ix) *Bythinia* Stein, 1850, *Schnecken Berlin* : 95 (an Invalid Emendation of *Bithinia* Gray, 1821, itself an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818)

(x) *Bythynia* Prashad, 1925, *Rec. Indian Mus.* **27** : 349 (an Erroneous Subsequent Spelling of *Bithynia* Leach, 1818).

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

13. Issue of Voting Paper V.P.(56)32 : On 27th July 1956 a Voting Paper (V.P.(56)32) was issued in which the Members of the Commission were invited to vote either for, or against, " the proposal relating to the generic name *Bithynia* Leach, 1818, as set out in Points (1) to (6) in paragraph 9 on page 278 of Volume

11 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the application reproduced in the first paragraph of the present *Opinion*], subject to the addition thereto of the supplementary proposals specified in Note 5 annexed to that Voting Paper [i.e. the proposals set out in paragraph 12 of the present *Opinion*].

14. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 27th October 1956.

15. Particulars of the Voting on Voting Paper V.P.(56)32 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(56)32 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-four* (24) *Commissioners* (*arranged in the order in which Votes were received*) :

Holthuis ; Bodenheimer ; Riley ; Sylvester-Bradley ; Hering ; Vokes ; Bradley (J.C.) ; Esaki ; Key ; Hankó ; Lemche ; Hemming ; Dymond ; Mayr ; Miller ; do Amaral ; Bonnet ; Prantl ; Tortonese ; Boschma ; Stoll ; Kühnelt ; Jaczewski ; Cabrera ;

(b) *Negative Votes, one* (1) :

Mertens ;

(c) *Voting Papers not returned* :

None.

16. Declaration of Result of Vote : On 28th October 1956, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(56)32,

signed a Certificate that the Votes cast were as set out in paragraph 15 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

17. Preparation of the Ruling given in the present " Opinion " : On 18th March 1957, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(56)32.

18. Original References : The original references for the generic and specific names placed on *Official Lists* by the Ruling given in the present *Opinion* are as follows :—

Bithynia Leach, 1818, *in* Clarke Abel's *Narrative of a Journey in the Interior of China* : 362

Ena Turton, 1831, *Manual Land & Fresh-water Shells Brit. Isles* : 80

montanus, *Bulimus*, Draparnaud, [1801], *Tabl. Moll. terrestr. fluviat. France* : 65

obscura, *Helix*, Müller (O.F.), 1774, *Verm. terrestr. fluviat. Hist.* **2** : 103

tentaculata, *Helix*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 774

19. The original references for the five generic names or reputed generic names specified in paragraph 9(3) of the application submitted in this case and placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* by the Ruling given in the present *Opinion* are as follows :—

Bulimus Scopoli, 1777, *Intr. Hist. nat.* : 392

Bulimus Bruguière, [1789], *Ency. méth.* Vers **1**(1) : xvi, 286

Bithinia Gray (J.E.), 1821, *London med. Repository* **15** : 239

Bythinia MacGillivray (W.), 1843, *Hist. Moll. Aberdeen* : 124

Bytinia Millet de la Turtaudière (P.A.), 1870, *Faune invertébr. Maine-et-Loire* **1** : 56

20. The original references for the ten generic names referred to in the Supplementary Proposals submitted by the Secretary with Note 5 to Voting Paper V.P.(56)32 and placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* by the Ruling given in the present *Opinion* are as specified in section (c) of paragraph 12 above.

21. The original references for the family-group names placed respectively on the *Official List* and on the *Official Index* of the names of taxa belonging to the family-group by the Ruling given in the present *Opinion* are as follows :—

BULIMIDAE Guilding, 1828, *Zool. J.* **3** : 532

BITHINIADAE Gray (J.E.), 1857 (an Invalid Original Spelling for BITHYNIIDAE)

BITHYNIIDAE (correction of BITHINIADAE) Gray (J.E.), 1857, *in* Turton's *Manual Land & Fresh-water Shells Brit. Isles* (ed. 3) : xiii, 24

22. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

23. The present *Opinion* shall be known as *Opinion* Four Hundred and Seventy-Five (475) of the International Commission on Zoological Nomenclature.

DONE in London, this Eighteenth day of March, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

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